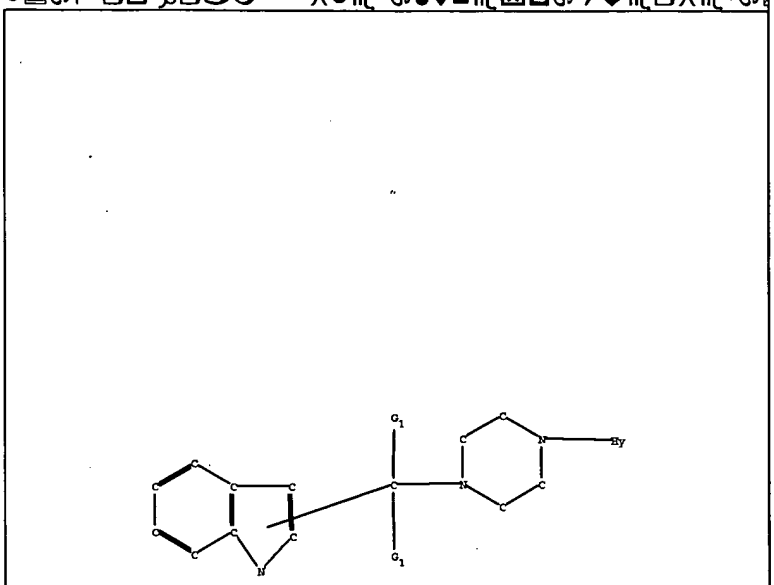

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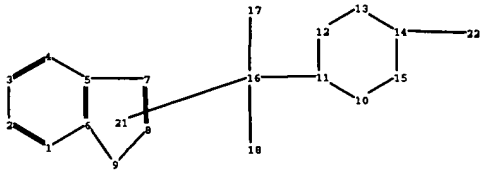

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SAMPLE SCREEN SEARCH COMPLETED -   7952 TO ITERATE

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INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       153695 TO   164385
PROJECTED ANSWERS:               1 TO      198

L2             1 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 17:22:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 158079 TO ITERATE

100.0% PROCESSED   158079 ITERATIONS                                46 ANSWERS
SEARCH TIME: 00.00.04

L3            46 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   161.76     161.97

FILE 'CAPLUS' ENTERED AT 17:22:34 ON 24 JUL 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE LAST UPDATED: 22 Jul 2005  (20050722/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

=> s l3
L4             24 L3

=> d l4 1-24 bib abs hitstr

L4   ANSWER 1 OF 24  CAPLUS  COPYRIGHT 2005 ACS on STN
AN   2005:409528  CAPLUS
DN   142:463728
TI   Preparation of 2,3-dihydro-6-nitroimidazo[2,1-b]oxazoles for the treatment
```

of tuberculosis

IN Tsubouchi, Hidetsugu; Sasaki, Hirofumi; Itotani, Motohiro; Haraguchi, Yoshikazu; Miyamura, Shin; Matsumoto, Makoto; Hashizume, Hiroyuki; Tomishige, Tatsuo; Kawasaki, Masanori; Ohguro, Kinue; Sumida, Takumi; Hasegawa, Takeshi; Tanaka, Kazuho; Takemura, Isao

PA Otsuka Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 941 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005042542	A1	20050512	WO 2004-JP16492	20041029

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI JP 2003-373206 A 20031031

JP 2004-111720 A 20040406

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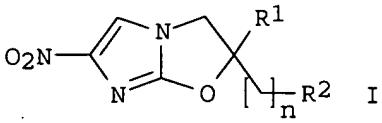

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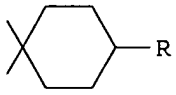


II

AB The title compds. I [R1 = H, alkyl; n = 0-6; R1 and (CH2)nR2, together with the adjacent carbon atom, may form a spiro ring represented by II (wherein R = substituted piperidyl); R2 = benzothiazolyloxy, quinolyloxy, pyridyloxy, etc.] which have an excellent bactericidal action against Mycobacterium tuberculosis, multi-drug-resistant Mycobacterium tuberculosis, and atypical acid-fast bacteria, were prepared and formulated. Thus, reacting (R)-2-chloro-1-(2-methyl-2-oxiranylmethyl)-4-nitro-1H-imidazole with 6-hydroxy-2-[4-(4-trifluoromethoxybenzyl)piperazin-1-yl]benzothiazole in the presence of NaH in DMF afforded 33% (R)-2-methyl-6-nitro-2-{2-[4-(4-trifluoromethoxybenzyl)piperazin-1-yl]benzothiazol-6-yloxymethyl}-2,3-dihydroimidazo[2,1-b]oxazole which showed MIC of 0.2 μg/mL in antibacterial test against M. tuberculosis Kurono in 7H11 medium.

IT **851701-20-7P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

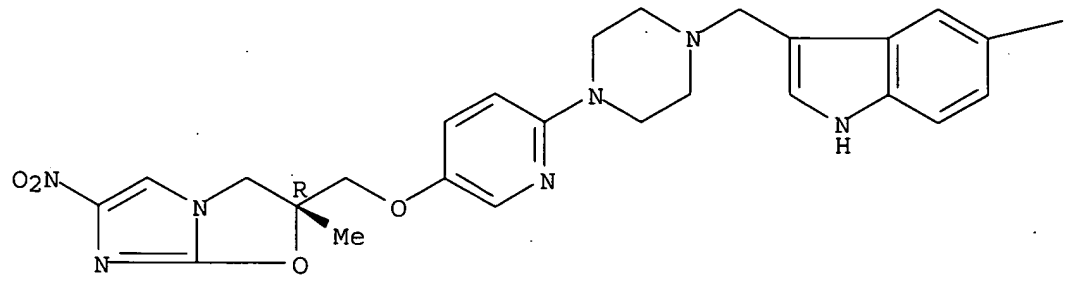
(preparation of 2,3-dihydro-6-nitroimidazo[2,1-b]oxazoles for the treatment of tuberculosis)

RN 851701-20-7 CAPLUS

CN 1H-Indole, 3-[[4-[5-[[(2R)-2,3-dihydro-2-methyl-6-nitroimidazo[2,1-b]oxazol-2-yl]methoxy]-2-pyridinyl]-1-piperazinyl]methyl]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

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RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:346852 CAPLUS
DN 142:386029
TI Dual alanyl aminopeptidase and dipeptidyl peptidase IV inhibitors for functionally influencing different cells and for treating immunological, inflammatory, neuronal and other diseases
IN Ansorge, Siegfried; Bank, Ute; Nordhoff, Karsten; Tager, Michael; Striggow, Frank
PA Institut fur Medizintechnologie Magdeburg IMTM G.m.b.H., Germany; Keyneurotek A.-G. Zenit Technologiepark
SO PCT Int. Appl., 100 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005034940	A2	20050421	WO 2004-EP11644	20041015

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

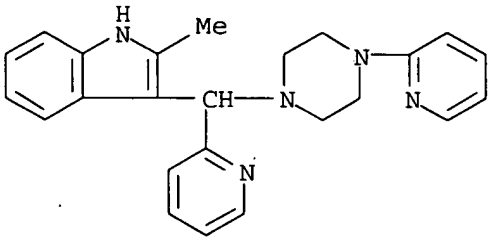
PRAI DE 2003-10348044 A 20031015
AB The invention discloses compds. which specifically inhibit both Ala-p-nitroanilide-cleaving peptidases as well as Gly-Pro-p-nitroanilide-cleaving peptidases, for use in the field of medicine. The invention also discloses the use of at least one substance of this type or of at least one pharmaceutical or cosmetic composition, which contains at least one of the aforementioned substances, for preventing and treating diseases, particularly for preventing and treating diseases with an overshooting immune response (autoimmune disease, allergies and transplant rejections), other chronic inflammatory diseases, neuronal diseases and cerebral

damage, skin diseases (e.g. acne and psoriasis), tumors, and special viral infections (e.g. SARS).

IT **457650-71-4**
RL: COS (Cosmetic use); DEV (Device component use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(alanyl aminopeptidase-dipeptidyl peptidase IV dual inhibitors for treating immunol., inflammatory, neuronal, and other diseases)

RN 457650-71-4 CAPLUS

CN 1H-Indole, 2-methyl-3-[2-pyridinyl[4-(2-pyridinyl)-1-piperazinyl]methyl]-(9CI) (CA INDEX NAME)



L4 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:1071547 CAPLUS

DN 142:68515

TI Certain 1,4-disubstituted aromatic piperidines and piperazines with extreme selectivity for the dopamine D4 receptor interact with a common receptor microdomain

AU Kortagere, Sandhya; Gmeiner, Peter; Weinstein, Harel; Schetz, John A.

CS Department of Physiology & Biophysics, Weill Medical College of Cornell University, New York, NY, USA

SO Molecular Pharmacology (2004), 66(6), 1491-1499
CODEN: MOPMA3; ISSN: 0026-895X

PB American Society for Pharmacology and Experimental Therapeutics

DT Journal

LA English

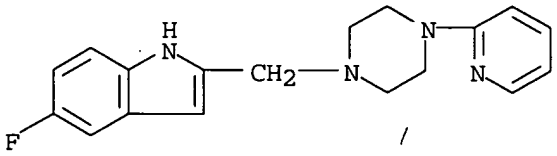
AB We previously demonstrated that, in the D4 dopamine receptor, the aromatic microdomain that spans the interface of the second and third transmembrane segments influences the high-affinity interactions with the D4-selective ligand L750,667 [3-{[4-(4-iodophenyl)piperazin-1-yl]methyl}-1H-pyrrolo[2,3-b]pyridine] and the D2-selective ligands methylspiperone, aripiprazole, and its congener OPC4392 [7-[3-(4-(2,3-dimethylphenyl)piperazinyl)propoxy] 2-(1H)-quinolinone] (Schetz et al., 2000). Here we tested a variety of 1,4-disubstituted aromatic piperidines/piperazines (1,4-DAPs) with different subtype selectivities and functional properties against a panel of D4 receptor mutations in the aromatic microdomain to ascertain whether these ligands recognize this common site. Mutant D4 receptors were constructed by substituting the nonconserved amino acid(s) from the corresponding locations in the D2 receptor. The D4-L2.60W, D4-F2.61V, and D4-LM3.28-3.29FV substitutions result in alterations of the relative position of members of the aromatic microdomain. From these results and mol. models of the ligand-receptor complexes, we conclude that 9 of the 11 D4-selective 1,4-DAPs, including L750,667, have a common pattern of ligand-receptor recognition that depends upon favorable interactions with the phenylalanine at position 2.61 (D4-F2.61V, 20-96-fold decrease). Like methylspiperone, aripiprazole, and OPC4392, the two D4-selective 1,4-DAPs that are insensitive to the D4-F2.61V mutation are sensitive to aroms. at position 2.60 (D4-L2.60W, 7-20-fold increase), and they all have longer spacer arms that permit their tethered aroms. to adopt alternative orientations in the binding-site crevice. All 11 of the D4-selective 1,4-DAPs were sensitive to the D4-LM3.28-3.29FV mutation (13-494-fold

decrease) but not the moderately D2-selective methylspiperone. The inferences suggest that subtype selectivity involves two different modes of interaction with the microdomain for the D4-selective 1,4-DAPs and a third mode for D2-selective 1,4-DAPs.

IT **220941-93-5**, CP226269
RL: PAC (Pharmacological activity); BIOL (Biological study)
(certain 1,4-disubstituted aromatic piperidines and piperazines with extreme selectivity for the dopamine D4 receptor interact with a common receptor microdomain)

RN 220941-93-5 CAPLUS

CN 1H-Indole, 5-fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:716001 CAPLUS

DN 142:151759

TI Indole mannich bases and their antimycobacterial effect

AU Malinka, Wieslaw; Swiatek, Piotr

CS Department of Chemistry of Drugs, Wroclaw Medical University, Wroclaw, 50-137, Pol.

SO Acta Poloniae Pharmaceutica (2004), 61(2), 107-111
CODEN: APPHAX; ISSN: 0001-6837

PB Polish Pharmaceutical Society

DT Journal

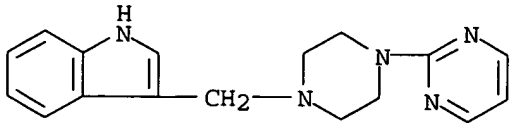
LA English

AB 3-[(4-Arylpiperazin-1-yl)methyl]indoles (2a-h) and 3-[(4-hydroxy-4-phenylpiperazin-1-yl)methyl]indole (3) were prepared and characterized by 1H NMR and mass spectrometry. All eight compds. (2a-c, e-h and 3) tested inhibited in vitro the growth of Mycobacterium tuberculosis H37Rv in the range of 98-7% at a concentration of ≥6.25 μg/mL. From the preliminary, microbiol. data it is possible to observe that a simple increasing of lipophilicity of the compds. tested to above logPcalc.≥3.8 significantly increases the potencies of their antitubercular action.

IT **371137-40-5P**
RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(indole mannich bases and their antimycobacterial effect)

RN 371137-40-5 CAPLUS

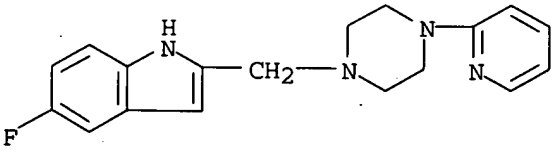
CN 1H-Indole, 3-[[4-(2-pyrimidinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:601211 CAPLUS
DN 141:151490
TI Comparative pharmacology of human dopamine D2-like receptor stable cell lines coupled to calcium flux through Gαqo5
AU Moreland, Robert B.; Nakane, Masaki; Donnelly-Roberts, Diana L.; Miller, Loan N.; Chang, Renjie; Uchic, Marie E.; Terranova, Marc A.; Gubbins, Earl J.; Helfrich, Rosalind J.; Namovic, Marian T.; El-Kouhen, Odile F.; Masters, Jeffrey N.; Brioni, Jorge D.
CS Neuroscience Research, Global Pharmaceutical Research and Development, Abbott Laboratories, Abbott Park, IL, 60064, USA
SO Biochemical Pharmacology (2004), 68(4), 761-772
CODEN: BCPCA6; ISSN: 0006-2952
PB Elsevier B.V.
DT Journal
LA English
AB The goal of this study was to develop a new approach to study the pharmacol. of the dopamine D4 receptor that could be used in comparative studies with dopamine D2 and D3 receptors. Stable HEK-293 cell lines co-expressing recombinant human D2L, D3 or D4 receptors along with Gαqo5 cDNA were prepared Dopamine induced a robust, transient calcium signal in these cell lines with EC50s for D2L, D3 and D4 of 18.0, 11.9 and 2.2 nM, resp. Reported D4-selective agonists CP 226269 and PD 168077 were potent, partial D4 agonists exhibiting 31-1700-fold selectivity for D4 over D3 or D2. Non-selective D2-like agonists apomorphine and quinpirole showed full efficacy but did not discriminate across the three receptors. D3-selective agonists 7-hydroxy-DPAT and PD 128907 were potent but non-selective D2-like agonists. The reported D3 partial agonist BP-897 exhibited minimal agonist activity at D3 but was a potent D3 antagonist and a partial D4 agonist. Other D2-like antagonists, haloperidol, clozapine, and domperidone showed concentration-dependent inhibition of dopamine responses at all three receptors with Ki ranging from 0.05 to 48.3 nM. The D3 selective antagonist S 33084 and D4-selective antagonist L-745870 were highly selective for D3 and D4 receptors with Kb of 0.7 and 0.1 nM, resp. Stable co-expression of D2-like receptors with chimeric Gαqo5 proteins in HEK-293 cells is an efficient method to study receptor activation in a common cellular background and an efficient method for direct comparison of ligand affinity and efficacy across human D2L, D3 and D4 receptors.
IT **220941-93-5**, CP 226269
RL: PAC (Pharmacological activity); BIOL (Biological study)
(human dopamine D2-like receptor stable cell lines coupled to calcium flux through Gαqo5 protein and comparative pharmacol. thereof)
RN 220941-93-5 CAPLUS
CN 1H-Indole, 5-fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

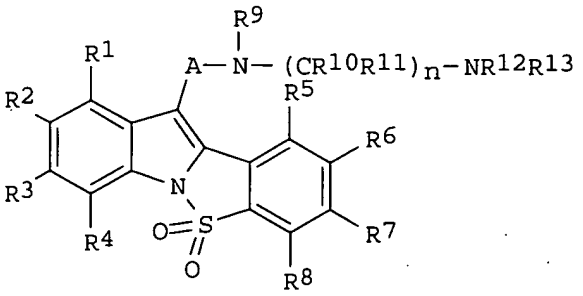
L4 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:534211 CAPLUS
DN 141:71531
TI Preparation of tetracyclic 3-substituted indoles with serotonin receptor affinity
IN Ramakrishna, Venkata Satya Nirogi; Shirsath, Vikas Shreekrishna; Kambhampati, Rama Sastri; Rao, Venkata Satya Veerabhadra Vadlamudi; Jasti, Venkateswarlu
PA Suven Life Sciences Limited, India
SO PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004055026	A1	20040701	WO 2003-IN393	20031216
WO 2004055026	C1	20050623		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI IN 2002-MA951 A 20021218
OS MARPAT 141:71531
GI



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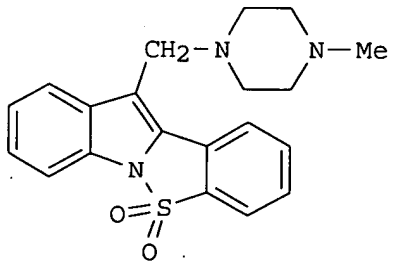


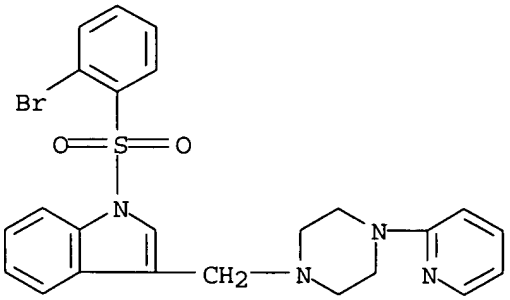
II

AB Tetracyclic indoles of formula I [A = (substituted) CH2, CO, SO2; R1-R11 = H, halo, perhaloalkyl, perhaloalkoxy, OH, amino, nitro, CN, CHO, aryl, aryloxy, alkoxy, etc.; R12 R13 = H, alkyl, cycloalkyl, aryl, aralkyl, heteroaryl, etc.; R9R12 = (substituted) alkylene; R1R2, R2R3, R3R4, R5R6, R6R7, R7R8 = five or six membered ring; n = 1-4] are prepared which have

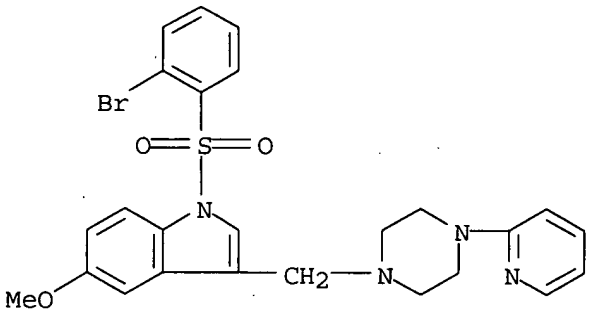
serotonin receptor affinity. The compds. can be used to treat diseases by modulating 5-HT or melatonin, or as a diagnostic tool after radiolabeling. Pharmaceutical compns. containing I are claimed. Thus, II was prepared from 1-(2-bromobenzenesulfonyl)-3-(4-methylpiperazin-1-ylmethyl)-1H-indole.

IT **701206-58-8P 713124-46-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of tetracyclic indoles with serotonin receptor affinity)

RN 701206-58-8 CAPLUS
CN 1H-Indole, 1-[(2-bromophenyl)sulfonyl]-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RN 713124-46-0 CAPLUS
CN 1H-Indole, 1-[(2-bromophenyl)sulfonyl]-5-methoxy-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:467857 CAPLUS
DN 141:38523
TI Preparation of N-arylsulfonyl-3-substituted indoles with serotonin receptor affinity for treatment of CNS disorders
IN Ramakrishna, Venkata Satya Nirogi; Shirsath, Vikas Shreekrishna; Kambhampati, Rama Sastri; Rao, Venkata Satya Veerabhadra Vadlamudi; Jasti, Venkateswarlu
PA Suven Life Sciences Limited, India
SO PCT Int. Appl., 118 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

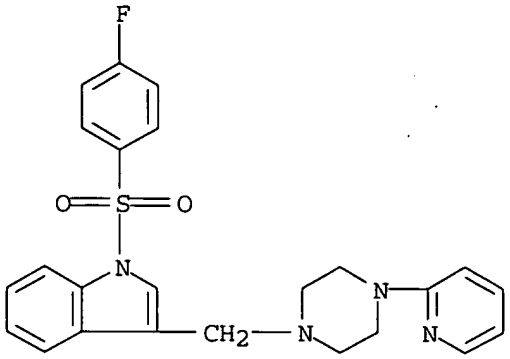
PI WO 2004048330 A1 20040610 WO 2003-IN209 20030605
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI IN 2002-MA884 A 20021128
OS MARPAT 141:38523
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

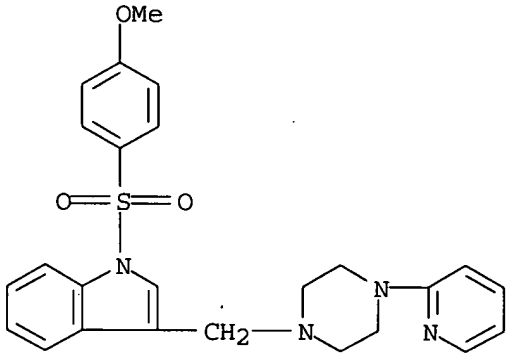
AB Title compds. I [wherein A = CH2, CO, SO2; R11 and R12 = substitutions on C when A = CH2; R1-R12, R14 and R15 = independently H, halo, oxo, thio, perhaloalkyl, OH, NH2, NO2, CN, CHO, amidino, guanidino, (un)substituted (cyclo)alkyl, (cyclo)alkenyl, alkynyl, (hetero)aryl(oxy) heterocyclyl(oxy), acyl(oxy), carbamido, etc.; R13, R16, and R17 = independently H, (un)substituted (cyclo)alkyl, (cyclo)alkenyl, alkynyl, (hetero)aryl, heterocyclyl; etc.; or R13 along with either R16 or R17 and the 2 N's may form a 5-7 membered (un)substituted heterocycle; n = 1-4; and derivs., analogs, tautomers, stereoisomers, geometric forms, N-oxides, polymorphs, and pharmaceutically acceptable salts or solvates thereof] were prepared as serotonin receptor (5-HT) modulators (no data). This invention also relates the use of pharmaceutical compns. containing I for the treatment of a wide variety of CNS disorders (no data). For example, 1-benzenesulfonyl-3-chloromethyl-5-nitro-1H-indole was coupled with N-methylpiperazine in CH2Cl2 to give II.

IT **701206-52-2P**, 1-(4-Fluorobenzenesulfonyl)-3-[[4-(pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole **701206-54-4P**, 1-(4-Methoxybenzenesulfonyl)-3-[[4-(pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole **701206-56-6P**, 1-(4-Isopropylbenzenesulfonyl)-3-[[4-(pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole **701206-58-8P**, 1-(2-Bromobenzenesulfonyl)-3-[[4-(pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole **701206-60-2P**, 1-(2-Bromo-4-methoxybenzenesulfonyl)-3-[[4-(pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole **701206-62-4P**, 5-Bromo-1-(4-fluorobenzenesulfonyl)-3-[[4-(pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole **701206-64-6P**, 5-Bromo-1-(4-methoxybenzenesulfonyl)-3-[[4-(pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole **701206-66-8P**, 5-Bromo-1-(4-isopropylbenzenesulfonyl)-3-[[4-(pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole **701206-68-0P**, 1-(4-Fluorobenzenesulfonyl)-5-methoxy-3-[[4-(pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole **701206-70-4P**, 1-(4-Methoxybenzenesulfonyl)-5-methoxy-3-[[4-(pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole **701206-72-6P**, 1-(4-Isopropylbenzenesulfonyl)-5-methoxy-3-[[4-(pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(5-HT modulator; preparation of N-arylsulfonyl-3-substituted indoles with serotonin receptor affinity for treatment of CNS disorders)

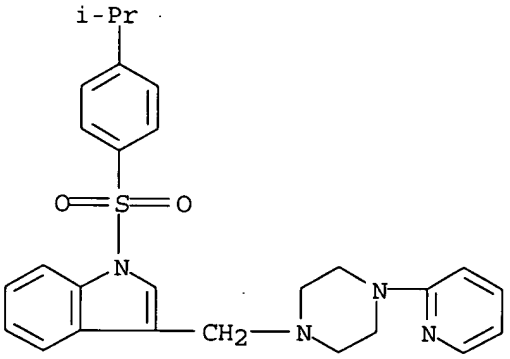
RN 701206-52-2 CAPLUS
CN 1H-Indole, 1-[(4-fluorophenyl)sulfonyl]-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



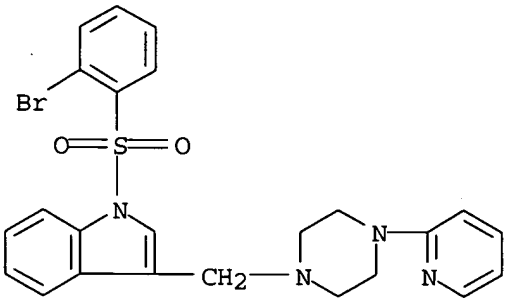
RN 701206-54-4 CAPLUS
CN 1H-Indole, 1-[(4-methoxyphenyl)sulfonyl]-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



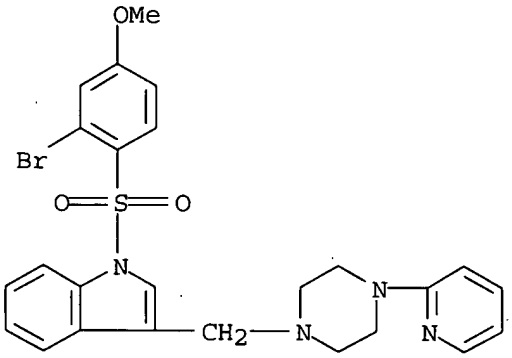
RN 701206-56-6 CAPLUS
CN 1H-Indole, 1-[[4-(1-methylethyl)phenyl]sulfonyl]-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



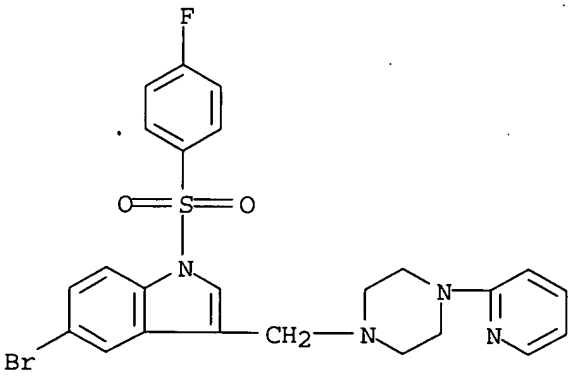
RN 701206-58-8 CAPLUS
CN 1H-Indole, 1-[(2-bromophenyl)sulfonyl]-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



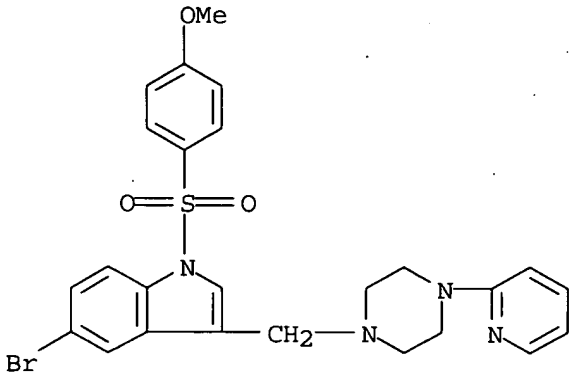
RN 701206-60-2 CAPLUS
CN 1H-Indole, 1-[(2-bromo-4-methoxyphenyl)sulfonyl]-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



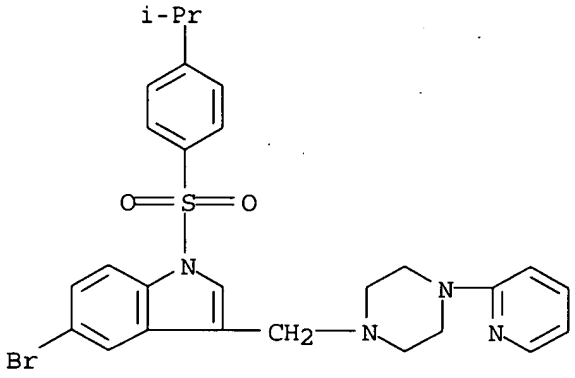
RN 701206-62-4 CAPLUS
CN 1H-Indole, 5-bromo-1-[(4-fluorophenyl)sulfonyl]-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



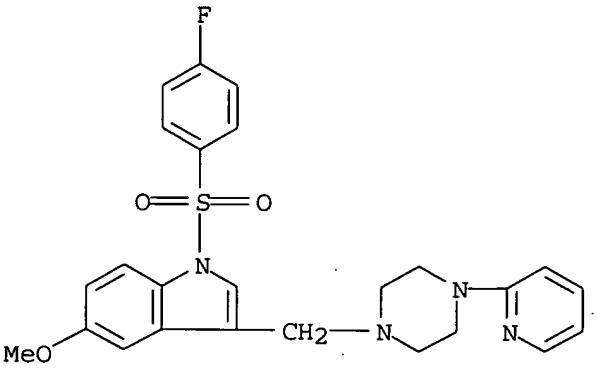
RN 701206-64-6 CAPLUS
CN 1H-Indole, 5-bromo-1-[(4-methoxyphenyl)sulfonyl]-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



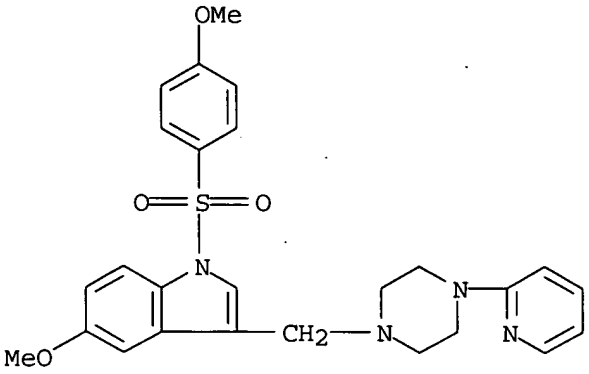
RN 701206-66-8 CAPLUS
CN 1H-Indole, 5-bromo-1-[[4-(1-methylethyl)phenyl]sulfonyl]-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



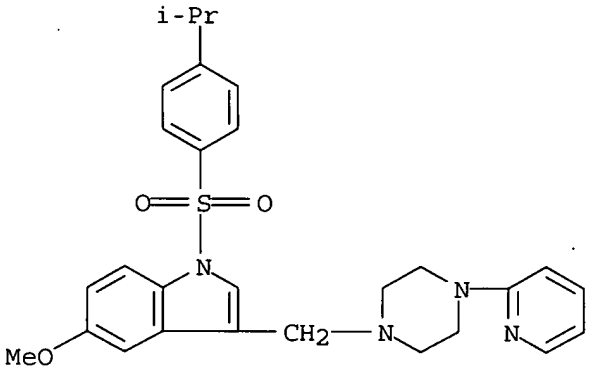
RN 701206-68-0 CAPLUS
CN 1H-Indole, 1-[(4-fluorophenyl)sulfonyl]-5-methoxy-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RN 701206-70-4 CAPLUS
CN 1H-Indole, 5-methoxy-1-[(4-methoxyphenyl)sulfonyl]-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)

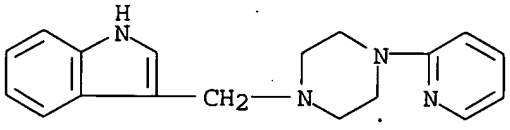


RN 701206-72-6 CAPLUS
CN 1H-Indole, 5-methoxy-1-[[4-(1-methylethyl)phenyl]sulfonyl]-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)

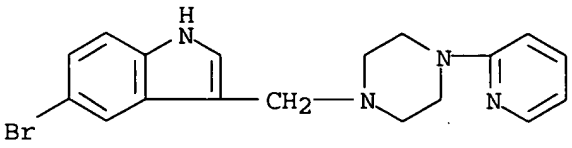


IT **300803-90-1P**, 3-[[4-(Pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole **701205-18-7P**, 5-Bromo-3-[[4-(pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole **701205-19-8P**, 5-Methoxy-3-[[4-(pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of N-arylsulfonyl-3-substituted indoles with serotonin receptor affinity for treatment of CNS disorders)

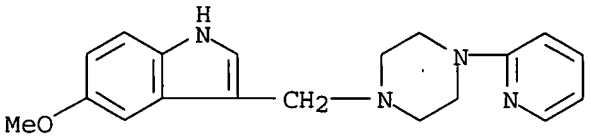
RN 300803-90-1 CAPLUS
CN 1H-Indole, 3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RN 701205-18-7 CAPLUS
CN 1H-Indole, 5-bromo-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RN 701205-19-8 CAPLUS
CN 1H-Indole, 5-methoxy-3-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



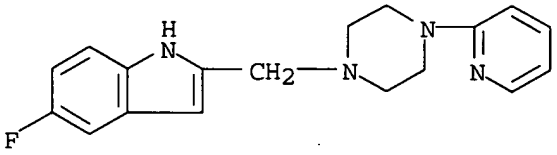
RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:465135 CAPLUS
DN 141:150462
TI Discovery of 2-(4-Pyridin-2-ylpiperazin-1-ylmethyl)-1H-benzimidazole (ABT-724), a Dopaminergic Agent with a Novel Mode of Action for the Potential Treatment of Erectile Dysfunction
AU Cowart, Marlon; Latshaw, Steven P.; Bhatia, Pramila; Daanen, Jerome F.; Rohde, Jeffrey; Nelson, Sherry L.; Patel, Meena; Kolasa, Teodozyi; Nakane, Masaki; Uchic, Marie E.; Miller, Loan N.; Terranova, Marc A.; Chang, Renjie; Donnelly-Roberts, Diana L.; Namovic, Marian T.; Hollingsworth, Peter R.; Martino, Brenda R.; Lynch, James J., III; Sullivan, James P.; Hsieh, Gin C.; Moreland, Robert B.; Brioni, Jorge D.; Stewart, Andrew O.
CS Department of Neuroscience Research, Abbott Laboratories, Abbott Park, IL, 60064-6123, USA
SO Journal of Medicinal Chemistry (2004), 47(15), 3853-3864
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
OS CASREACT 141:150462
AB A new class of agents with potential utility for the treatment of erectile dysfunction has been discovered, guided by the hypothesis that selective D4 agonists are erectogenic but devoid of the side effects typically associated with dopaminergic agents. The lead agent 2-(4-pyridin-2-ylpiperazin-1-ylmethyl)-1H-benzimidazole (1, ABT-724) was discovered by optimization of a series of benzimidazole arylpiperazines. This highly selective D4 agonist was found to be very potent and efficacious in vivo, eliciting penile erections in rats at a dose of 0.03 μmol/kg, with a pos. response rate of 77% erectile incidence. Even at high doses, it was devoid of side effects in animal models of central nervous system behaviors, emesis, or nausea. The structure-activity relationship of the parent benzimidazole series leading to 1 is described, with the detailed in vitro and in vivo profiles described. Distinctive structural features were discovered that are associated with D4 selective agonism in this series of analogs.
IT **632334-63-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and structure-activity relationship studies of ABT-724 and arylpiperazine-piperidine analogs, as dopaminergic agents with a novel

mode of action for treatment of erectile dysfunction)
RN 632334-63-5 CAPLUS
CN 1H-Indole, 5-fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

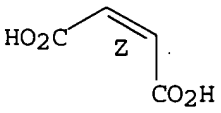
CRN 220941-93-5
CMF C18 H19 F N4



CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.

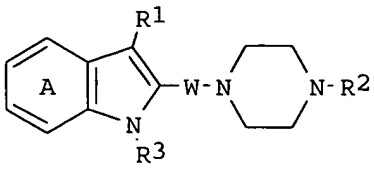


RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:429913 CAPLUS
DN 141:7137
TI Preparation of indoles as inhibitors against aspartate protease, β-secretase, and amyloid β protein for treatment of nerve disorders and myopathy
IN Watanabe, Hiroyuki; Kurasawa, Osamu; Tarui, Naoki; Yorimoto, Takashi; Hirai, Keisuke
PA Takeda Chemical Industries, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 67 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004149429	A2	20040527	JP 2002-314580	20021029
PRAI	JP 2002-314580		20021029		

OS MARPAT 141:7137
GI



I

AB Indoles I [R1 = halo, (un)substituted ring; R2 = (un)substituted ring; R3 = H, (un)substituted hydrocarbyl; W = divalent lower hydrocarbylene; ring A may be substituted], their salts, or prodrugs are prepared Also claimed is Ser-Glu-Val-Asn-Leu-Asp-Ala-Glu-Lys-Arg-Arg which is labeled by fluorescent donor (maximum emission at .apprx.562 nm) at the Ser residue and by fluorescent quencher (maximum absorption at .apprx.644 nm) at the Lys residue, for measurement of β-secretase-inhibiting activity of test compds. Thus, 3-[4-(2-formyl-1H-indol-3-yl)phenyl]-1H-indole-2-carbaldehyde was treated with 4-piperazin-1-ylindole 2HCl and Na triacetoxyborohydride, and converted into trifluoroacetate to give the corresponding indole derivative, which inhibited human recombinant β-secretase with IC50 value of 0.82 μM.

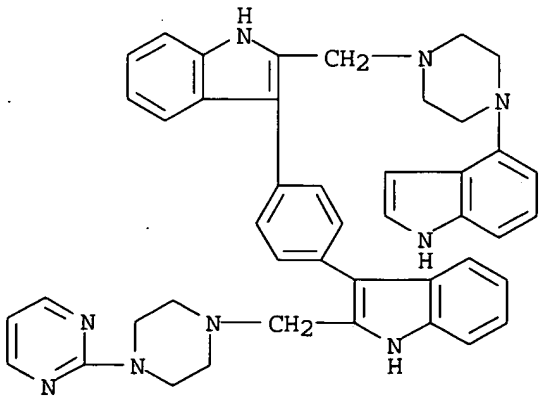
IT **693801-03-5P 693801-05-7P**
RL: ANT (Analyte); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of indoles as aspartate protease and β-secretase inhibitors for treatment of nerve disorders and myopathy)

RN 693801-03-5 CAPLUS

CN 1H-Indole, 2-[[4-(1H-indol-4-yl)-1-piperazinyl]methyl]-3-[4-[2-[[4-(2-pyrimidinyl)-1-piperazinyl]methyl]-1H-indol-3-yl]phenyl]-, hexakis(trifluoroacetate) (9CI) (CA INDEX NAME)

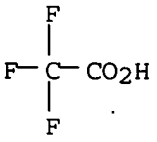
CM 1

CRN 693801-02-4
CMF C44 H43 N9



CM 2

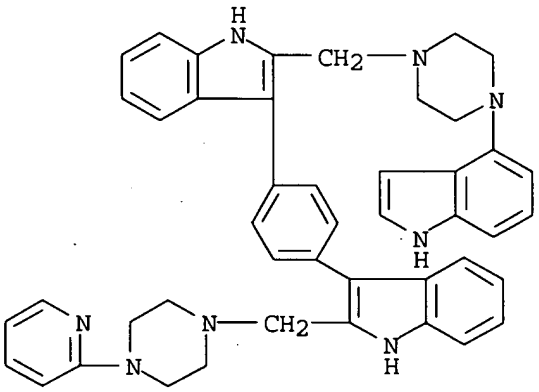
CRN 76-05-1
CMF C2 H F3 O2



RN 693801-05-7 CAPLUS
CN 1H-Indole, 2-[[4-(1H-indol-4-yl)-1-piperazinyl]methyl]-3-[4-[2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]-1H-indol-3-yl]phenyl]-, pentakis(trifluoroacetate) (9CI) (CA INDEX NAME)

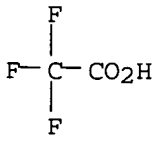
CM 1

CRN 693801-04-6
CMF C45 H44 N8



CM 2

CRN 76-05-1
CMF C2 H F3 O2



L4 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:236724 CAPLUS
DN 140:399345
TI Dopamine D4 ligands and models of receptor activation: 2-(4-pyridin-2-ylpiperazin-1-ylmethyl)-1H-benzimidazole and related heteroarylmethylarylpiperazines exhibit a substituent effect responsible for additional efficacy tuning
AU Stewart, Andrew O.; Cowart, Marlon D.; Moreland, Robert B.; Latshaw, Steve P.; Matulenko, Mark A.; Bhatia, Pramila A.; Wang, Xueqing; Daanen, Jerome F.; Nelson, Sherry L.; Terranova, Marc A.; Namovic, Marian T.; Donnelly-Roberts, Diana L.; Miller, Loan N.; Nakane, Masaki; Sullivan, James P.; Brioni, Jorge D.
CS Global Pharmaceutical Research and Development, Department R4ND,

Neuroscience Research, Abbott Laboratories, Abbott Park, IL, 60064-6115, USA

SO Journal of Medicinal Chemistry (2004), 47(9), 2348-2355
CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

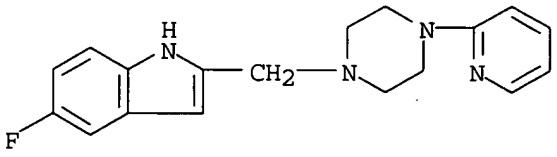
LA English

AB A series of subtype selective dopamine D4 receptor ligands from the heteroarylmethylphenylpiperazine class have been discovered that exhibit a remarkable structure-activity relation (SAR), revealing a substituent effect in which regiosubstitution on the terminal arylpiperazine ring can modulate functional or intrinsic activity. Other structure-dependent efficacy studies in the dopamine D4 field have suggested a critical interaction of the heteroarylmethyl moiety with specific protein microdomains in controlling intrinsic activity. The authors studies indicate that for some binding orientations, the phenylpiperazine moiety also plays a key role in determining efficacy. These data also implicate a kinetic or efficiency term, contained within measured functional affinities for agonists, which support a sequential binding and conformational stabilization model for receptor activation. The structural similarity between partial agonist and antagonist, within this subset of ligands, and lack of bioisosterism for this substituent effect are key phenomena for these hypotheses.

IT **220941-93-5**, CP 226269
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dopamine D4 ligands and models of receptor activation using 4-pyridinylpiperazinylmethyl-1H-benzimidazole and related heteroarylmethylarylpiperazines which exhibit a substituent effect)

RN 220941-93-5 CAPLUS

CN 1H-Indole, 5-fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:65348 CAPLUS

DN 140:229240

TI Central mechanisms regulating penile erection in conscious rats: The dopaminergic systems related to the proerectile effect of apomorphine

AU Hsieh, Gin C.; Hollingsworth, Peter R.; Martino, Brenda; Chang, Renjie; Terranova, Marc A.; O'Neill, Alyssa B.; Lynch, James J.; Moreland, Robert B.; Donnelly-Roberts, Diana L.; Kolasa, Teodozyi; Mikusa, Joseph P.; McVey, Jill M.; Marsh, Kennan C.; Sullivan, James P.; Brioni, Jorge D.

CS Neuroscience Research, Global Pharmaceutical Research and Development, Abbott Laboratories, Abbott Park, IL, USA

SO Journal of Pharmacology and Experimental Therapeutics (2004), 308(1), 330-338
CODEN: JPETAB; ISSN: 0022-3565

PB American Society for Pharmacology and Experimental Therapeutics

DT Journal

LA English

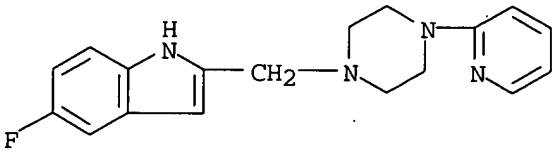
AB Apomorphine has been used as a pharmacol. probe of dopaminergic receptors

in a variety of central nervous system disorders. The utility of apomorphine as an agent for the treatment of erectile dysfunction has also been demonstrated clin. Apomorphine is a nonselective dopaminergic receptor agonist with potent binding affinity (Ki) of 101, 32, 26, 2.6, and 10 nM for D1, D2, D3, D4, and D5, resp. When administered either s.c. (s.c.) or intracerebroventricularly (i.c.v.), apomorphine fully evoked penile erections in conscious rats with maximum effect at 0.1 μmol/kg s.c. and 3 nmol/rat i.c.v., resp. Apomorphine was less efficacious when injected intrathecally (i.t.) to L4-L6 spinal levels (50% at 30 - 100 nmol/rat i.t.). Penile erection facilitated by apomorphine was blocked by haloperidol and clozapine (i.p. and i.c.v.) but not by domperidone (a peripherally acting dopaminergic receptor antagonist). In this model using conscious rats, penile erection was significantly induced by quinpirole (D2-D3-D4 receptor agonist), but not by R(+)-1-phenyl-2,3,4,5-tetrahydro-1H-3-benzazepine-7,8-diol (SKF38393) and R(+)-6-chloro-7,8-dihydroxy-1-phenyl-2,3,4,5-tetrahydro-1H-3-benzapine (SKF81297) (D1 receptor agonists), or a D2 receptor agonist R-5,6-dihydro-N,N-dimethyl-4H-imidazo[4,5,1-ij]quinolin-5-amine (PNU-95666E). The role of D4 receptors in penile erection was demonstrated using selective D4 receptor agonists [(4-phenylpiperazinyl)-methyl]benzamide (PD168077) and 5-fluoro-2-{[4-(2-pyridinyl)-1-piperazinyl]methyl}-1H-indole (CP226269), whether administered systemically (s.c.) or locally in the brain (i.c.v.). The ability of apomorphine to activate D3 receptors in relation to its proerectile activity remains to be elucidated by use of selective subtype agonists. These results suggest that the proerectile action of apomorphine in rats is mediated at supraspinal levels and that this effect is not mimicked by a D2 receptor agonist but associated with activation of D4 receptors.

IT **220941-93-5**, 5-Fluoro-2-{[4-(2-pyridinyl)-1-piperazinyl]methyl}-1H indole
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(central mechanisms regulating penile erection in conscious rats and the dopaminergic systems related to the proerectile effect of apomorphine)

RN 220941-93-5 CAPLUS

CN 1H-Indole, 5-fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

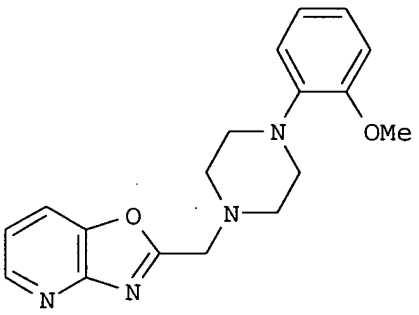
L4 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:972080 CAPLUS
DN 140:27845
TI Fused bicyclic aromatic compounds with dopamine D4 receptor agonist activity that are useful in treating sexual dysfunction, and their preparation and use
IN Cowart, Marlon D.
PA Abbott Laboratories, USA
SO PCT Int. Appl., 149 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003101994	A1	20031211	WO 2003-US16878	20030529
	W: CA, JP, MX				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
	US 2004002488	A1	20040101	US 2002-158370	20020529
	US 2004063713	A1	20040401	US 2003-443814	20030523
PRAI	US 2002-158370	A	20020529		
	US 2003-443814	A	20030523		
	US 2002-384291P	P	20020529		

OS MARPAT 140:27845

GI



II

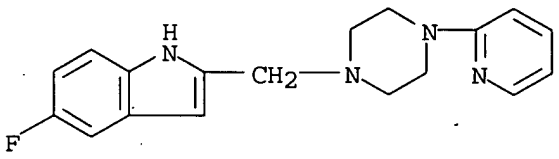
AB The invention relates to the use of title compds. A-L-D-B1 (I) for the treatment of sexual dysfunction, and to compns. containing compds. I for such treatment [wherein: A = various (un)substituted 6/5- and 5/5-fused bicyclic aromatic nuclei, including indole, benzothiophene, pyrrolopyridine, oxazolopyridine, thiazolopyridine, and thienoimidazole; L = alkylene; D = (un)substituted 1,4-piperidinediyl, 1,2,5,6-tetrahydropyridine-1,4-diyl, 1,4-(homo)piperazinediyl, 2,5-diazabicyclo[2.2.1]heptane-2,5-diyl; B1 = (un)substituted Ph, 2-pyridinyl, 1-oxy-2-pyridinyl, 2-pyrimidinyl, 6-oxopyridazin-1-yl, various azol-2-yls, 2-furyl, 2-thienyl; with 1 excluded compound]. The compds. are centrally active dopamine D4 receptor agonists. Claimed uses are primarily for treatment of male and female sexual dysfunction, especially male erectile dysfunction, as well as other conditions, including cardiovascular, inflammatory, and various CNS disorders. Approx. 70 compds. I and a variety of intermediates were prepared For instance, cyclocondensation of 2-amino-3-pyridinol with ClCH2C(OMe)3 in diglyme in the presence of p-MeC6H4SO3H at 80° gave 2-(chloromethyl)-[1,3]oxazolo[4,5-b]pyridine, which was aminated with 1-(2-methoxyphenyl)piperazine in MeCN to give invention compound II. In a functional test against human D4 receptor expressed in a stable HEK-293 cell line, representative compds. I exhibited EC50 values (vs. 10 μM dopamine) in the range of 7.5 nM to 3800 nM. In a rat penile erection model, representative compds. I at 0.01-1.0 μmol/kg s.c. gave at least 30% incidence of erection(s) during 1 h after administration.

IT **220941-93-5P**, 5-Fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]-1H-indole **632333-70-1P**, 2-[1-[4-(2-Pyridinyl)-1-piperazinyl]ethyl]-1H-indole **632333-72-3P**, 5-Fluoro-2-[[(1S,4S)-5-(2-pyridinyl)-2,5-diazabicyclo[2.2.1]hept-2-yl]methyl]-1H-indole **632334-59-9P**, 5-Fluoro-2-[[(1S,4S)-5-(2-pyridinyl)-2,5-diazabicyclo[2.2.1]hept-2-yl]methyl]-1H-indole maleate (1:1.3) **632334-63-5P**, 5-Fluoro-2-[[4-(pyridin-2-yl)piperazin-1-yl]methyl]-1H-indole maleate (1:1)

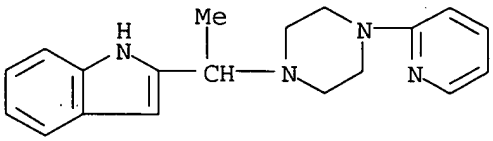
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of fused bicyclic aromatic compds. as dopamine D4
agonists for treatment of sexual dysfunction)

RN 220941-93-5 CAPLUS
CN 1H-Indole, 5-fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)

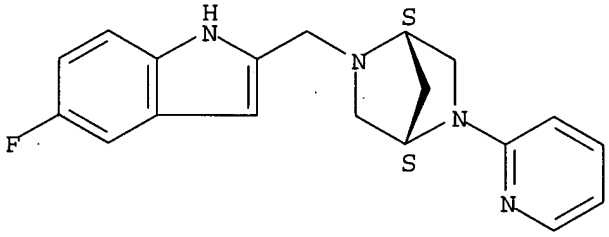


RN 632333-70-1 CAPLUS
CN 1H-Indole, 2-[1-[4-(2-pyridinyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)



RN 632333-72-3 CAPLUS
CN 2,5-Diazabicyclo[2.2.1]heptane, 2-[(5-fluoro-1H-indol-2-yl)methyl]-5-(2-pyridinyl)-, (1S,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

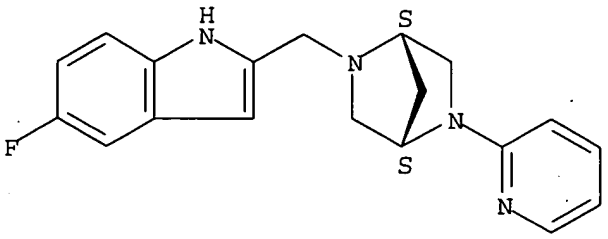


RN 632334-59-9 CAPLUS
CN 2,5-Diazabicyclo[2.2.1]heptane, 2-[(5-fluoro-1H-indol-2-yl)methyl]-5-(2-pyridinyl)-, (1S,4S)-, (2Z)-2-butenedioate (10:13) (9CI) (CA INDEX NAME)

CM 1

CRN 632333-72-3
CMF C19 H19 F N4

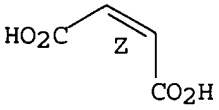
Absolute stereochemistry.



CM 2

CRN 110-16-7
CMF C4 H4 O4

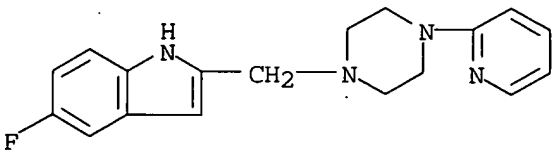
Double bond geometry as shown.



RN 632334-63-5 CAPLUS
CN 1H-Indole, 5-fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

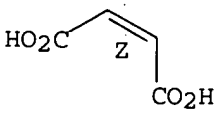
CRN 220941-93-5
CMF C18 H19 F N4



CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:836590 CAPLUS
DN 139:323437

TI Preparation of heteroaryls for therapeutic use in pharmaceutical compositions as kinase inhibitors for treatment of hyperproliferative diseases, including cancer

IN Li, Qun; Woods, Keith W.; Zhu, Gui-Dong; Fischer, John P.; Gong, Jianchun; Li, Tongmei; Gandhi, Virajkumar; Thomas, Sheela A.; Packard, Garrick K.; Song, Xiaohong; Abrams, Jason N.; Diebold, Robert B.; Dinges, Jurgen; Hutchins, Charles W.; Stoll, Vincent S.; Rosenberg, Saul H.; Giranda, Vincent L.

PA Abbott Laboratories, USA

SO U.S. Pat. Appl. Publ., 120 pp., which
CODEN: USXXCO

DT Patent

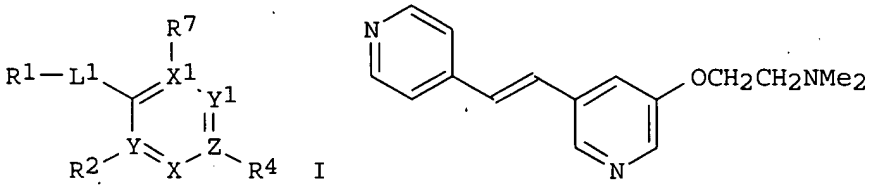
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003199511	A1	20031023	US 2002-317914	20021212
	US 6831175	B2	20041214		
PRAI	US 2001-341356P	P.	20011213		
	US 2001-341474P	P	20011217		

OS MARPAT 139:323437

GI



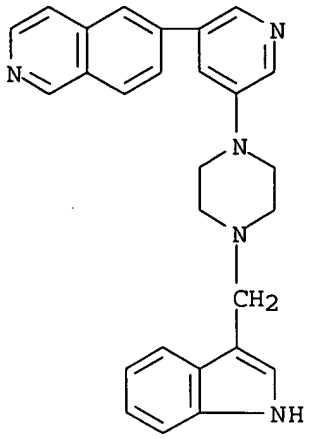
I II

AB Compds., such as I [X = CR8, N (R8 = H, alkyl, NH2, etc.); X1, Y, Z = C, N; Y1 = CR9, N (R9 = H, L2L3(R3)(R6)); provided that 0-2 of X, X1, Y, Y1 and Z are N; L 1 = a bond, CO, S, etc.; L2 = a bond, O, S, etc.; L3 = a bond, alkylidene, alkylene; R1 = aryl, heteroaryl, heterocyclyl; R2 and R4 are absent or selected from H, alkenyl, alkyl, etc.; R2 and L1, together with the carbon atoms to which they are attached, form aryl, heteroaryl, heterocyclyl; R2 and L2, together with the carbon atoms to which they are attached, form aryl, heteroaryl, heterocyclyl; R3 = absent, H, aryl, arylalkoxy, etc.; R6 = H, aryl, arylalkoxy, etc.; R7 = absent, H, alkyl, cyanoalkenyl, etc.; R7 and L1, together with the carbon atoms to which they are attached, form aryl, heteroaryl, heterocyclyl; with the provisos], were prepared for therapeutic use as protein kinase inhibitors. Thus, 3,5-dibromopyridine was treated with HOCH2CH2NMe2, followed by 4-vinylpyridine to give the pyridinylethenylpyridine II. The prepared heteroaryls were assayed for inhibition of enzymic activity against kinases Akt1, Akt2, Akt3, PKA, PKC, Erk2 Chk1, Cdc2, Src, CK2, MAPKAP kinase-2 and SGK. Pharmaceutical compns. comprising aryls and heteroaryls I were claimed.

IT **552325-57-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of heteroaryls for therapeutic use in pharmaceutical compns. as kinase inhibitors for treatment of hyperproliferative diseases, including cancer)

RN 552325-57-2 CAPLUS

CN Isoquinoline, 6-[5-[4-(1H-indol-3-ylmethyl)-1-piperazinyl]-3-pyridinyl]- (9CI) (CA INDEX NAME)

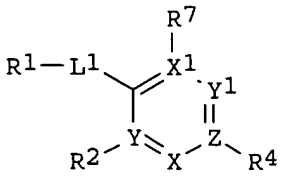


RE.CNT 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:777399 CAPLUS
DN 139:292151
TI Preparation of pyridine derivatives as protein kinase inhibitors
IN Li, Qun; Woods, Keith W.; Zhu, Gui-Dong; Fischer, John P.; Gong, Jianchun; Li, Tongmei; Gandhi, Virajkumar; Thomas, Sheela A.; Packard, Garrick K.; Song, Xiaohong; Abrams, Jason N.; Diebold, Robert; Dinges, Jurgen; Hutchins, Charles; Stoll, Vincent S.; Rosenberg, Saul H.; Giranda, Vincent L.
PA USA
SO U.S. Pat. Appl. Publ., 120 pp., Cont.-in-part of U.S. Ser. No. 23,363, abandoned.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003187026	A1	20031002	US 2002-295833	20021118
	CA 2470214	AA	20030626	CA 2002-2470214	20021212
	WO 2003051366	A2	20030626	WO 2002-US39915	20021212
	WO 2003051366	A3	20040325		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1463505	A2	20041006	EP 2002-790126	20021212
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	JP 2005516927	T2	20050609	JP 2003-552299	20021212
PRAI	US 2001-23363	B2	20011213		
	US 2002-295833	A	20021118		
	WO 2002-US39915	W	20021212		

OS MARPAT 139:292151
GI



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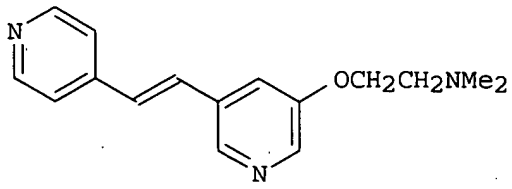


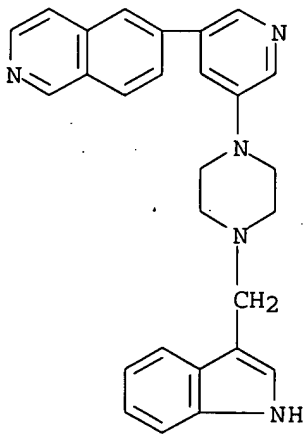
II

AB The title compds. I [X = CR8, N (R8 = H, alkyl, NH2, etc.); X1, Y, Z = C, N; Y1 = CR9, N (R9 = H, L2L3(R3)(R6)); provided that 0-2 of X, X1, Y, Y1 and Z are N; L 1 = a bond, CO, S, etc.; L2 = a bond, O, S, etc.; L3 = a bond, alkylidene, alkylene; R1 = aryl, heteroaryl, heterocyclyl; R2 and R4 are absent or selected from H, alkenyl, alkyl, etc.; R2 and L1, together with the carbon atoms to which they are attached, form aryl, heteroaryl, heterocyclyl; R2 and L2, together with the carbon atoms to which they are attached, form aryl, heteroaryl, heterocyclyl; R3 = absent, H, aryl, arylalkoxy, etc.; R6 = H, aryl, arylalkoxy, etc.; R7 = absent, H, alkyl, cyanoalkenyl, etc.; R7 and L1, together with the carbon atoms to which they are attached, form aryl, heteroaryl, heterocyclyl; with the provisos] were prepared for use as kinase inhibitors with 77-100% inhibition of Akt at 1 μM. Thus, 3,5-dibromopyridine was treated with HOCH2CH2NMe2, followed by 4-vinylpyridine to give the pyridinylethenylpyridine (E)-II. Pharmaceutical composition comprising the compound I was claimed.

IT **552325-57-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyridine derivs. as protein kinase inhibitors)

RN 552325-57-2 CAPLUS

CN Isoquinoline, 6-[5-[4-(1H-indol-3-ylmethyl)-1-piperazinyl]-3-pyridinyl]-(9CI) (CA INDEX NAME)



L4 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:491046 CAPLUS

DN 139:69152

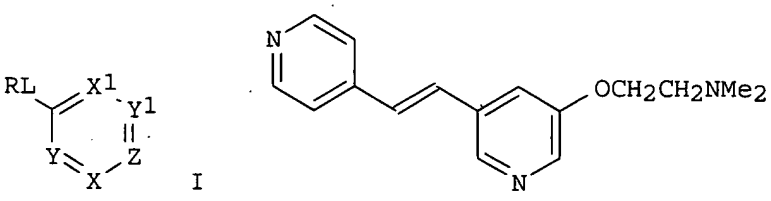
TI Preparation of pyridine derivatives as protein kinase inhibitors

IN Li, Qun; Woods, Keith W.; Zhu, Gui-Dong; Fischer, John P.; Gong, Jianchun; Li, Tongmei; Gandhi, Viraj; Thomas, Sheela A.; Packard, Garrick; Song,

Xiaohong; Abrams, Jason N.; Diebold, Robert; Dinges, Jurgen; Hutchins, Charles; Stoll, Vincent S.; Rosenberg, Saul H.; Giranda, Vincent L.
PA Abbott Laboratories, USA
SO PCT Int. Appl., 261 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003051366	A2	20030626	WO 2002-US39915	20021212
	WO 2003051366	A3	20040325		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003187026	A1	20031002	US 2002-295833	20021118
	CA 2470214	AA	20030626	CA 2002-2470214	20021212
	EP 1463505	A2	20041006	EP 2002-790126	20021212
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	JP 2005516927	T2	20050609	JP 2003-552299	20021212
PRAI	US 2001-23363	A	20011213		
	US 2002-295833	A	20021118		
	WO 2002-US39915	W	20021212		

OS MARPAT 139:69152
GI

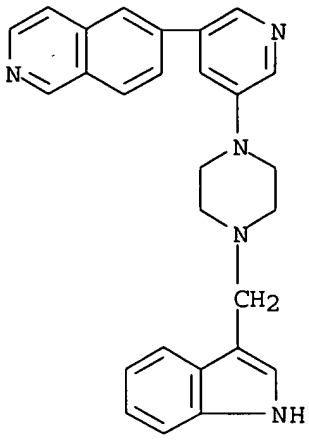


I II

AB Pyridines I [X, X1, Y, Y1, Z = N, (un)substituted CH; L = O, alkenyl, alkynyl, CO, S, s(O), SO2, (un)substituted NH, SO2NH, NHSO2, CH2, CH2NH, NHCO, CONH; R = aryl, heteroaryl, heterocyclic] were prepared for use as kinase inhibitors with 77-100% inhibition of Akt at 1 μM. Thus, 3,5-dibromopyridine was treated with HOCH2CH2NMe2, followed by 4-vinylpyridine to give the pyridinylethenylpyridine (E)-II.

IT **552325-57-2P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyridine derivs. as protein kinase inhibitors)

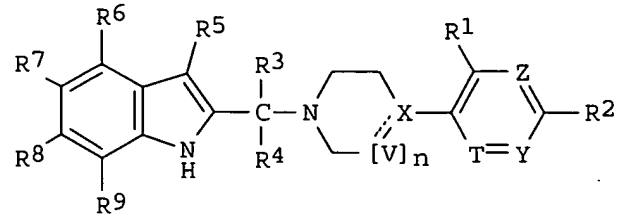
RN 552325-57-2 CAPLUS
CN Isoquinoline, 6-[5-[4-(1H-indol-3-ylmethyl)-1-piperazinyl]-3-pyridinyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:414122 CAPLUS
DN 138:401610
TI Preparation of 2-(4-aryl or heteroaryl-piperazin-1-ylmethyl)-1H-indole derivatives as dopamine D4 receptor subtype ligands
IN Fliri, Anton Franz Josef; Majchrzak, Mark Jerome; Seymour, Patricia Ann; Zorn, Steven Howard; Rollema, Hans
PA Pfizer Inc., USA
SO U.S. Pat. Appl. Publ., 13 pp., Cont. of U.S. Ser. No. 842,569, abandoned.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003100757	A1	20030529	US 2003-340699	20030110
	US 2004198734	A1	20041007	US 2004-825406	20040415
PRAI	US 2001-842569	B1	20010425		
	US 2003-340699	B1	20030110		

OS MARPAT 138:401610
GI



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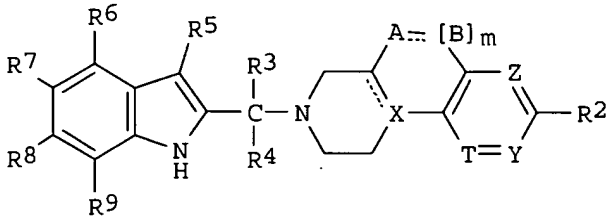
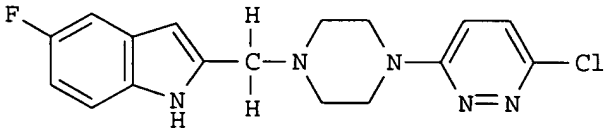


II



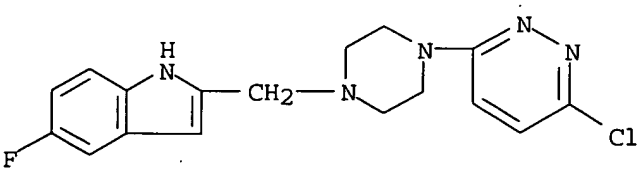
III

AB The title compds. [I; a = 0-1; V = CHR10 (wherein R10 = H, alkyl); T = N, CH; X = N, CR11 (R11 = H, alkyl, alkoxy, etc.); Y, Z = N, CR12 (R12 = H, Cl, CF3, etc.); R1 = H, halo, CF3, etc.; R2, R6-R9 = H, halo, CF3, etc.; R3, R4 = H, alkyl; R5 = H, alkoxy, CF3, etc.; or when n = 1, R1 and R10 may be taken together with the carbons to which they are attached to form II (m = 0-1; A, B = CH, CH2, O, S, NH, N)] and their pharmaceutically acceptable salts, useful for treating a disorder of the dopamine system such as psychotic disorders, movement disorders, gastrointestinal disorders, and vascular and cardiovascular disorders, were prepared E.g, a 3-step synthesis of indole III which showed Ki of < 2 μM for the displacement of [H3]-spiperone, was given.

IT **220941-59-3P 220941-93-5P 220941-95-7P**
220941-97-9P 220943-21-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 2-(4-aryl or heteroaryl-piperazin-1-ylmethyl)-1H-indole derivs. as dopamine D4 receptor subtype ligands)

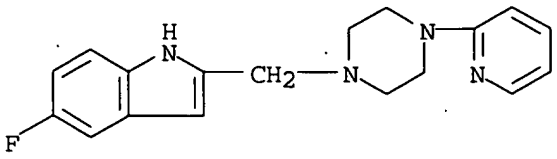
RN 220941-59-3 CAPLUS

CN 1H-Indole, 2-[[4-(6-chloro-3-pyridazinyl)-1-piperazinyl]methyl]-5-fluoro- (9CI) (CA INDEX NAME)

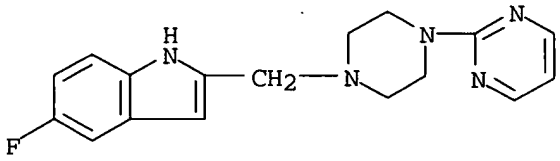


RN 220941-93-5 CAPLUS

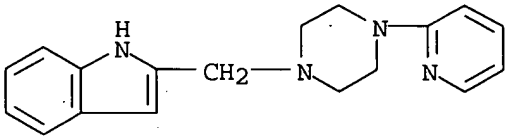
CN 1H-Indole, 5-fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



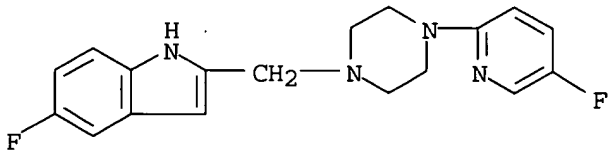
RN 220941-95-7 CAPLUS
CN 1H-Indole, 5-fluoro-2-[[4-(2-pyrimidinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RN 220941-97-9 CAPLUS
CN 1H-Indole, 2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RN 220943-21-5 CAPLUS
CN 1H-Indole, 5-fluoro-2-[[4-(5-fluoro-2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:716033 CAPLUS
DN 137:242189
TI Dopamine D4 receptor antagonists as treatment for attention deficit-hyperactivity disorder
IN Baldessarini, Ross J.; Zhang, Kehong; Tarazi, Frank I.
PA The McLean Hospital Corporation, USA
SO PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002072029	A2	20020919	WO 2002-US7651	20020312
	WO 2002072029	A3	20030103		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

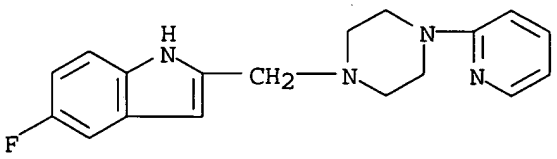
	US 2002187920	A1	20021212	US 2002-96673	20020312
	US 6747029	B2	20040608		
PRAI	US 2001-275198P	P	20010312		

AB The invention discloses the use of dopamine D4 receptor-selective antagonist for inhibiting motor hyperactivity in a mammal exhibiting the symptoms of attention deficit-hyperactivity disorder (ADHD).

IT **220941-93-5**, CP-226269
RL: PAC (Pharmacological activity); BIOL (Biological study)
(dopamine D4 receptor antagonists as treatment for attention deficit-hyperactivity disorder)

RN 220941-93-5 CAPLUS

CN 1H-Indole, 5-fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:408526 CAPLUS

DN 136:395987

TI The use of selective dopamine D4 receptor agonists for treating sexual dysfunction

IN Brioni, Jorge D.; Kolasa, Teodozyj; Hsieh, Gin C.; Donnelly-Roberts, Diane L.

PA Abbott Laboratories, USA

SO PCT Int. Appl., 30 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002041894	A2	20020530	WO 2001-US43139	20011121
	WO 2002041894	A3	20021017		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	US 2002103105	A1	20020801	US 2001-985974	20011107
	CA 2429383	AA	20020530	CA 2001-2429383	20011121
	AU 2002026895	A5	20020603	AU 2002-26895	20011121
	EP 1345608	A2	20030924	EP 2001-995843	20011121

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

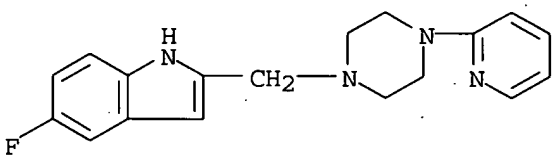
	JP 2004534725	T2	20041118	JP 2002-544072	20011121
	BR 2001010450	A	20050209	BR 2001-10450	20011121
	ZA 2003003093	A	20041027	ZA 2003-3093	20030422
	BG 107810	A	20040227	BG 2003-107810	20030513
	NO 2003002304	A	20030715	NO 2003-2304	20030521
PRAI	US 2000-718311	A	20001122		
	US 2001-985974	A	20011107		
	US 2000-252768P	P	20001122		
	WO 2001-US43139	W	20011121		

AB The present invention relates to the use of selective dopamine D4 receptor agonists and to compns. containing selective dopamine D4 receptor agonists for the treatment of sexual dysfunction.

IT **220941-93-5**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of selective dopamine D4 receptor agonists for treating sexual dysfunction)

RN 220941-93-5 CAPLUS

CN 1H-Indole, 5-fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:104619 CAPLUS

DN 136:145264

TI Dopamine D4 ligands for the treatment of novelty-seeking disorders

IN Fliri, Anton Franz Josef; Sanner, Mark Allen; Seymour, Patricia Ann; Zorn, Stevin Howard

PA Pfizer Products Inc., USA

SO Eur. Pat. Appl., 27 pp.
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1177792	A2	20020206	EP 2001-306163	20010718
	EP 1177792	A3	20021023		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

	JP 2002104969	A2	20020410	JP 2001-225529	20010726
	US 2002049209	A1	20020425	US 2001-915605	20010726
	US 6548502	B2	20030415		
	US 2003158208	A1	20030821	US 2003-361293	20030210
	US 2004116443	A1	20040617	US 2003-731265	20031209
PRAI	US 2000-221268P	P	20000727		
	US 2001-915605	A3	20010726		
	US 2003-361293	B1	20030210		

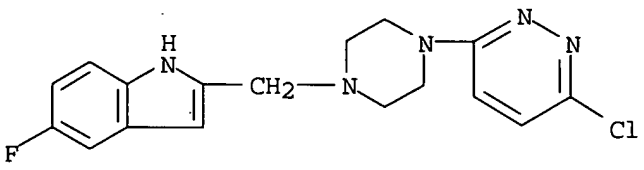
OS MARPAT 136:145264

AB The invention discloses the use of a dopamine D4 receptor ligand in the manufacture of a medicament for the treatment or prevention of a novelty-seeking disorder, particularly pathol. gambling, attention deficit

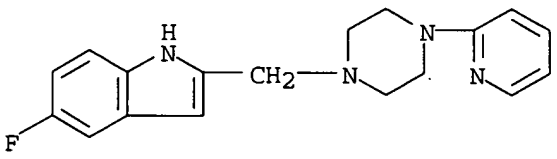
disorder with hyperactivity disorder, substance addiction, drug addiction, alc. addiction and sex addiction.

IT **220941-59-3 220941-93-5 220943-21-5**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dopamine D4 ligand for treatment of novelty-seeking disorder)

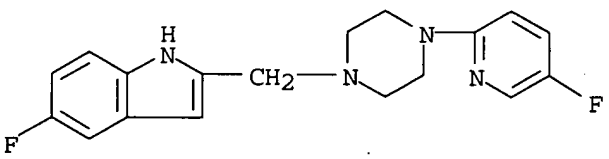
RN 220941-59-3 CAPLUS
CN 1H-Indole, 2-[[4-(6-chloro-3-pyridazinyl)-1-piperazinyl]methyl]-5-fluoro- (9CI) (CA INDEX NAME)



RN 220941-93-5 CAPLUS
CN 1H-Indole, 5-fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RN 220943-21-5 CAPLUS
CN 1H-Indole, 5-fluoro-2-[[4-(5-fluoro-2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



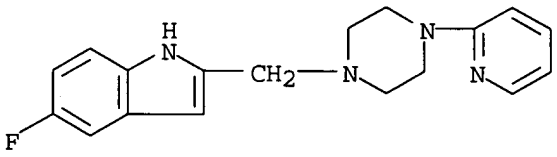
L4 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:445858 CAPLUS
DN 135:175875
TI Nigrostriatal dopaminergic denervation enhances dopamine D4 receptor binding in rat caudate-putamen
AU Zhang, K.; Tarazi, F. I.; Baldessarini, R. J.
CS Mailman Research Center, McLean Division of Massachusetts General Hospital, Belmont, MA, 02478, USA
SO Pharmacology, Biochemistry and Behavior (2001), 69(1/2), 111-116
CODEN: PBBHAU; ISSN: 0091-3057
PB Elsevier Science Inc.
DT Journal
LA English
AB Radioligand binding to dopamine (DA) D4 receptors was examined in adult rat forebrain 5 wk after unilateral 6-hydroxydopamine (6-OHDA) lesioning of substantia nigra to remove ascending nigrostriatal dopaminergic projections. D4 receptor binding was increased by up to 47% in denervated caudate-putamen (CPu) in rats that rotated away from the lesioned side

with apomorphine challenge, with lesser changes in rats that failed to rotate with apomorphine. Functional significance of D4 receptor upregulation induced by the lesions was investigated by examining behavioral effects of the highly selective D4 agonist CP-226,269 and antagonist CP-293,019. Neither agent induced rotation at doses as high as 30 mg/kg i.p. Pretreatment with the D4 antagonist CP-293,019 did not affect rotation induced by either a D1-like (SKF-38393) or D2-like receptor (quinpirole) agonist. These findings provide the first evidence that D4 receptors can be upregulated by nigrostriatal dopaminergic denervation. They also suggest that, unlike D1 and D2 receptors, D4 receptors do not play a pivotal role in rotational behavior in rats with unilateral dopaminergic lesions.

IT **220941-93-5**, CP 226269
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(D4 receptor agonist; nigrostriatal dopaminergic denervation effect on dopamine D4 receptors and rotational behavior in rat caudate-putamen)

RN 220941-93-5 CAPLUS

CN 1H-Indole, 5-fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:187871 CAPLUS

DN 133:144790

TI Topographically based search for an "Ethogram" among a series of novel D4 dopamine receptor agonists and antagonists

AU Clifford, J. J.; Waddington, J. L.

CS Department of Clinical Pharmacology, Royal College of Surgeons in Ireland, Dublin, Ire.

SO Neuropsychopharmacology (2000), 22(5), 538-544
CODEN: NEROEW; ISSN: 0893-133X

PB Elsevier Science Inc.

DT Journal

LA English

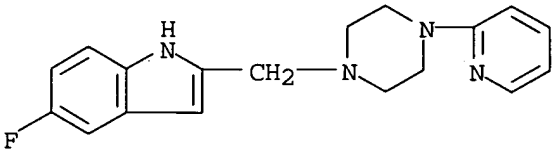
AB The effects of three selective D4 antagonists [CP-293,019, L-745,870, and Ro 61-6270] and two putative selective D4 agonists [CP-226,269 and PD 168077] were compared with those of the generic D2-like [D2L/S,D3, D4] antagonist haloperidol to identify any characteristic "ethogram," in terms of individual topogs. of behavior within the natural rodent repertoire, as evaluated using ethol. based approaches. Among the D4 antagonists, neither L-745,870 (0.0016-1.0 mg/kg) nor Ro 61-6270 (0.2-25.0 mg/kg) influenced any behavior; whereas, CP-293,019 (0.2-25.0 mg/kg) induced episodes of nonstereotyped sniffing, sifting, and vacuous chewing; there were no consistent effects on responsivity to the D2-like agonist RU 24213. Among the putative D4 agonists, CP-226,269 (0.2-25.0 mg/kg) failed to influence any behavior; whereas, PD 168077 (0.2-25.0 mg/kg) induced nonstereotyped shuffling locomotion with uncoordinated movements, jerking, and yawning, which were insensitive to antagonism by CP-293,019, L-745,870, or haloperidol. These findings fail to indicate any "ethogram" for selective manipulation of D4 receptor function at the level of the interaction between motoric and psychol. processes in sculpting behavioral

topog. over habituation of exploration through to quiescence and focus attention on social, cognitive, or other levels of examination

IT **220941-93-5**, CP 226269
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(search for an "Ethogram" among a series of novel D4 dopamine receptor agonists and antagonists)

RN 220941-93-5 CAPLUS

CN 1H-Indole, 5-fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:139842 CAPLUS

DN 130:209603

TI Preparation of 2-(4-aryl or heteroaryl-piperazin-1-ylmethyl)-1H-indole derivatives as dopamine D4 receptor subtype ligands

IN Fliri, Anton Franz Josef; Majchrzak, Mark Jerome; Seymour, Patricia Ann; Zorn, Stevin Howard; Rollema, Hans

PA Pfizer Products Inc., USA

SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9909025	A2	19990225	WO 1998-IB1198	19980805
	WO 9909025	A3	19990415		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2297486	AA	19990225	CA 1998-2297486	19980805
	CA 2297486	C	20050503		
	AU 9884572	A1	19990308	AU 1998-84572	19980805
	EP 1003739	A2	20000531	EP 1998-935229	19980805
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
	TR 200000414	T2	20000821	TR 2000-200000414	19980805
	BR 9811557	A	20000822	BR 1998-11557	19980805
	JP 2002536291	T2	20021029	JP 2000-509706	19980805
	ZA 9807304	A	20000214	ZA 1998-7304	19980814
	BG 104069	A	20010531	BG 2000-104069	20000110
	NO 2000000722	A	20000214	NO 2000-722	20000214
	MX 200001611	A	20001020	MX 2000-1611	20000215
PRAI	US 1997-55764P	P	19970815		
	WO 1998-IB1198	W	19980805		

OS MARPAT 130:209603

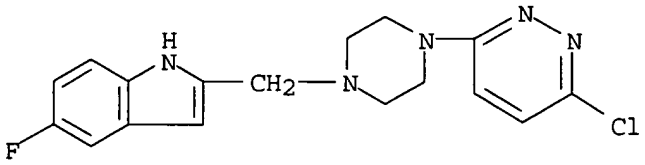
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

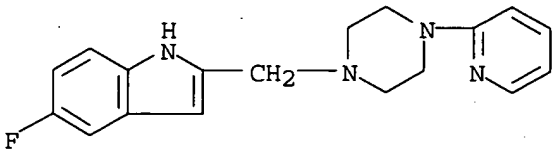
AB The title compds. [I; a = 0-1; V = CHR10 (wherein R10 = H, alkyl); T = N, CH; X = N, CR11 (R11 = H, alkyl, alkoxy, etc.); Y, Z = N, CR12 (R12 = H, Cl, CF3, etc.); R1 = H, halo, CF3, etc.; R2, R6-R9 = H, halo, CF3, etc.; R3, R4 = H, alkyl; R5 = H, alkoxy, CF3, etc.; or when a = 1, R1 and R10 may be taken together with the carbons to which they are attached to form II (b = 0-1; A, B = CH, CH2, O, S, NH, N)] and their pharmaceutically acceptable salts, useful for treating a disorder of the dopamine system such as psychotic disorders, movement disorders, gastrointestinal disorders, and vascular and cardiovascular disorders, were prepared E.g, a 3-step synthesis of indole III which showed Ki of < 2 μM for the displacement of [H3]-spiperone, was given.

IT **220941-59-3P 220941-93-5P 220941-95-7P**
220941-97-9P 220943-21-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 2-(4-aryl or heteroaryl-piperazin-1-ylmethyl)-1H-indole derivs. as dopamine D4 receptor subtype ligands)

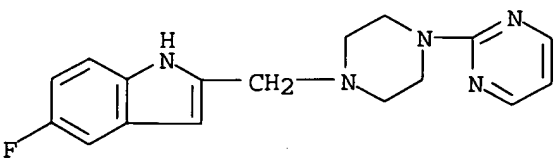
RN 220941-59-3 CAPLUS
CN 1H-Indole, 2-[[4-(6-chloro-3-pyridazinyl)-1-piperazinyl]methyl]-5-fluoro- (9CI) (CA INDEX NAME)



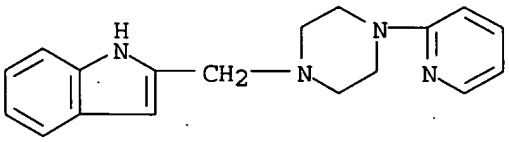
RN 220941-93-5 CAPLUS
CN 1H-Indole, 5-fluoro-2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



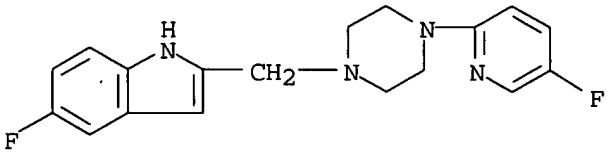
RN 220941-95-7 CAPLUS
CN 1H-Indole, 5-fluoro-2-[[4-(2-pyrimidinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RN 220941-97-9 CAPLUS
CN 1H-Indole, 2-[[4-(2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



RN 220943-21-5 CAPLUS
CN 1H-Indole, 5-fluoro-2-[[4-(5-fluoro-2-pyridinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



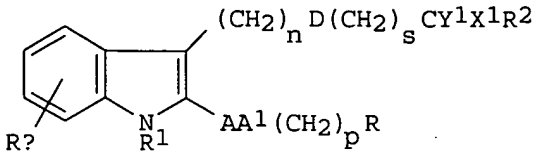
L4 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:293836 CAPLUS
DN 126:264004
TI Preparation and formulation of indole derivatives as neuropeptide Y receptor antagonists
IN Britton, Thomas C.; Bruns, Robert F., Jr.; Gehlert, Donald R.; Hipskind, Philip A.; Lobb, Karen L.; Nixon, James A.; Ornstein, Paul L.; Smith, Edward C. R.; Zarrinmayeh, Hamideh; Zimmerman, Dennis M.
PA Eli Lilly and Co., USA
SO PCT Int. Appl., 309 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9709308	A1	19970313	WO 1996-US14163	19960830
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM				
	US 6245761	B1	20010612	US 1996-705379	19960829
	CA 2203912	AA	19970313	CA 1996-2203912	19960830
	AU 9669650	A1	19970327	AU 1996-69650	19960830
	AU 717422	B2	20000323		
	EP 789688	A1	19970820	EP 1996-930691	19960830
	R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	BR 9606619	A	19971223	BR 1996-6619	19960830
	CN 1173867	A	19980218	CN 1996-191324	19960830
	JP 10508321	T2	19980818	JP 1996-511344	19960830
	NO 9702016	A	19970617	NO 1997-2016	19970430
	NO 308296	B1	20000828		
PRAI	US 1995-3150P	P	19950901		

	GB 1995-23999	A	19951123
	US 1996-21638P	P	19960712
	WO 1996-US14163	W	19960830

OS MARPAT 126:264004

GI



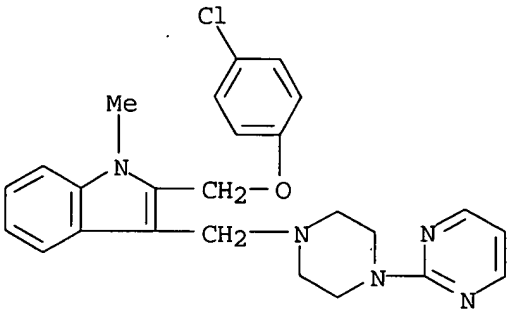
I

AB The title compds. I [Ra = H, alkyl, etc.; R1 = H, alkyl, etc.; A = bond, CO, etc.; A1 = bond, O, etc.; n, p, s = 0 - 6; D = bond, etc.; one of X1 and Y1 is hydroxy and the other is hydrogen; or both X1 and Y1 are hydrogen, or X1 and Y1 combine to form oxo, etc.; R2 = OH, etc.; R = Ph, etc.] are prepared I are useful in treating or preventing a condition associated with an excess of neuropeptide Y. Many of the compds. of this invention are said to show significant activity as neuropeptide Y receptor antagonists (Ki = 10 μM to 0.1 nM).

IT **188720-79-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and formulation of indole derivs. as neuropeptide Y receptor antagonists)

RN 188720-79-8 CAPLUS

CN 1H-Indole, 2-[(4-chlorophenoxy)methyl]-1-methyl-3-[[4-(2-pyrimidinyl)-1-piperazinyl]methyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:21074 CAPLUS

DN 116:21074

TI Diaromatic substituted anti-AIDS compounds

IN Romero, Donna Lee; Mitchell, Mark Allen; Thomas, Richard Charles; Palmer, John Raymond; Tarpley, William Gary; Aristoff, Paul Adrian; Smith, Herman W.

PA Upjohn Co., USA

SO PCT Int. Appl., 165 pp.
CODEN: PIXXD2

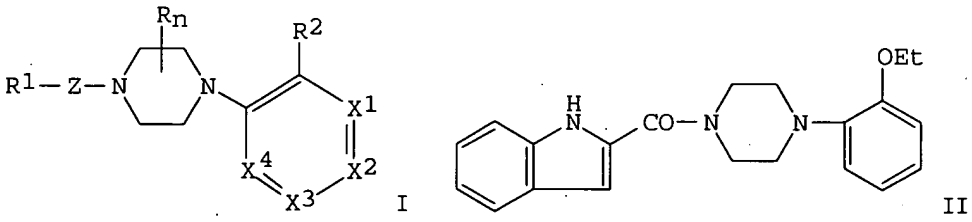
DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	WO 9109849	A1	19910711	WO 1990-US7390	19901224
	W: AU, BB, BG, BR, CA, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU, US				
	RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, DK, ES, FR, GA, GB, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG				
	CA 2071529	AA	19910629	CA 1990-2071529	19901224
	CA 2071529	C	20010320		
	AU 9171732	A1	19910724	AU 1991-71732	19901224
	AU 654808	B2	19941124		
	EP 507861	A1	19921014	EP 1991-902628	19901224
	EP 507861	B1	19960911		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	HU 61296	A2	19921228	HU 1992-2131	19901224
	JP 05503929	T2	19930624	JP 1991-502810	19901224
	JP 07110852	B4	19951129		
	AT 142621	E	19960915	AT 1991-902628	19901224
	ES 2093090	T3	19961216	ES 1991-902628	19901224
	RU 2099335	C1	19971220	RU 1992-5011431	19920131
	LV 10264	B	19951020	LV 1993-292	19930505
	US 5563142	A	19961008	US 1994-198428	19940222
	US 5489593	A	19960206	US 1994-349694	19941202
PRAI	US 1989-457483	A	19891228		
	US 1990-603838	A2	19901025		
	WO 1990-US7390	A	19901224		
	US 1992-904247	B3	19920625		
	US 1993-57041	B1	19930430		
	US 1994-200094	B1	19940222		
OS	MARPAT 116:21074				
GI					

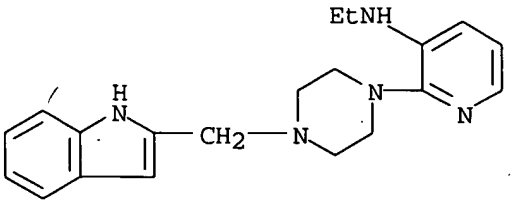


AB Piperazine-containing compds. I [X1, X2, X3 = N or (un)substituted CH, X4 = N, CH, N(O); Z = CH2, CO, COCH2, SO2, CH:CHCO; Rn = H, Me, alkylene, oxo, etc.; R1 = aryl, heteroaryl; R2 = carboxylic ester or amide group, alkyl, etc.] were prepared as anti-AIDS agents (viral reverse transcriptase inhibition data are tabulated). Thus, 2-indolecarboxylic acid was treated with 1-(2-ethoxyphenyl)piperazine in THF in the presence of 1,1'-carbonyldiimidazole to give indolylcarbonylpiperazine II, isolated as the HCl salt.

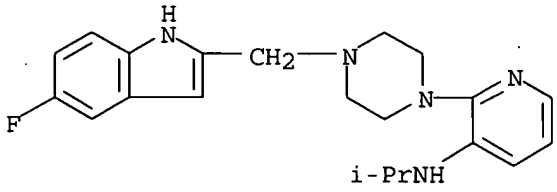
IT **136816-79-0P 136816-91-6P 136817-35-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and anti-AIDS activity of)

RN 136816-79-0 CAPLUS

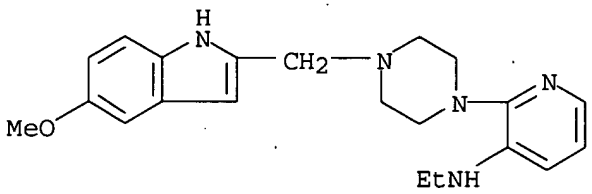
CN 3-Pyridinamine, N-ethyl-2-[4-(1H-indol-2-ylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



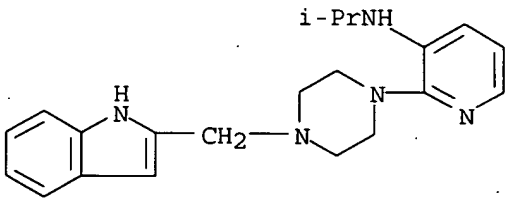
RN 136816-91-6 CAPLUS
CN 3-Pyridinamine, 2-[4-[(5-fluoro-1H-indol-2-yl)methyl]-1-piperazinyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 136817-35-1 CAPLUS
CN 3-Pyridinamine, N-ethyl-2-[4-[(5-methoxy-1H-indol-2-yl)methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



IT **136816-98-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 136816-98-3 CAPLUS
CN 3-Pyridinamine, 2-[4-(1H-indol-2-ylmethyl)-1-piperazinyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



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FULL ESTIMATED COST	119.01	280.98

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-17.52	-17.52

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FILE LAST UPDATED: 01 May 1997 (19970501/UP)

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
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